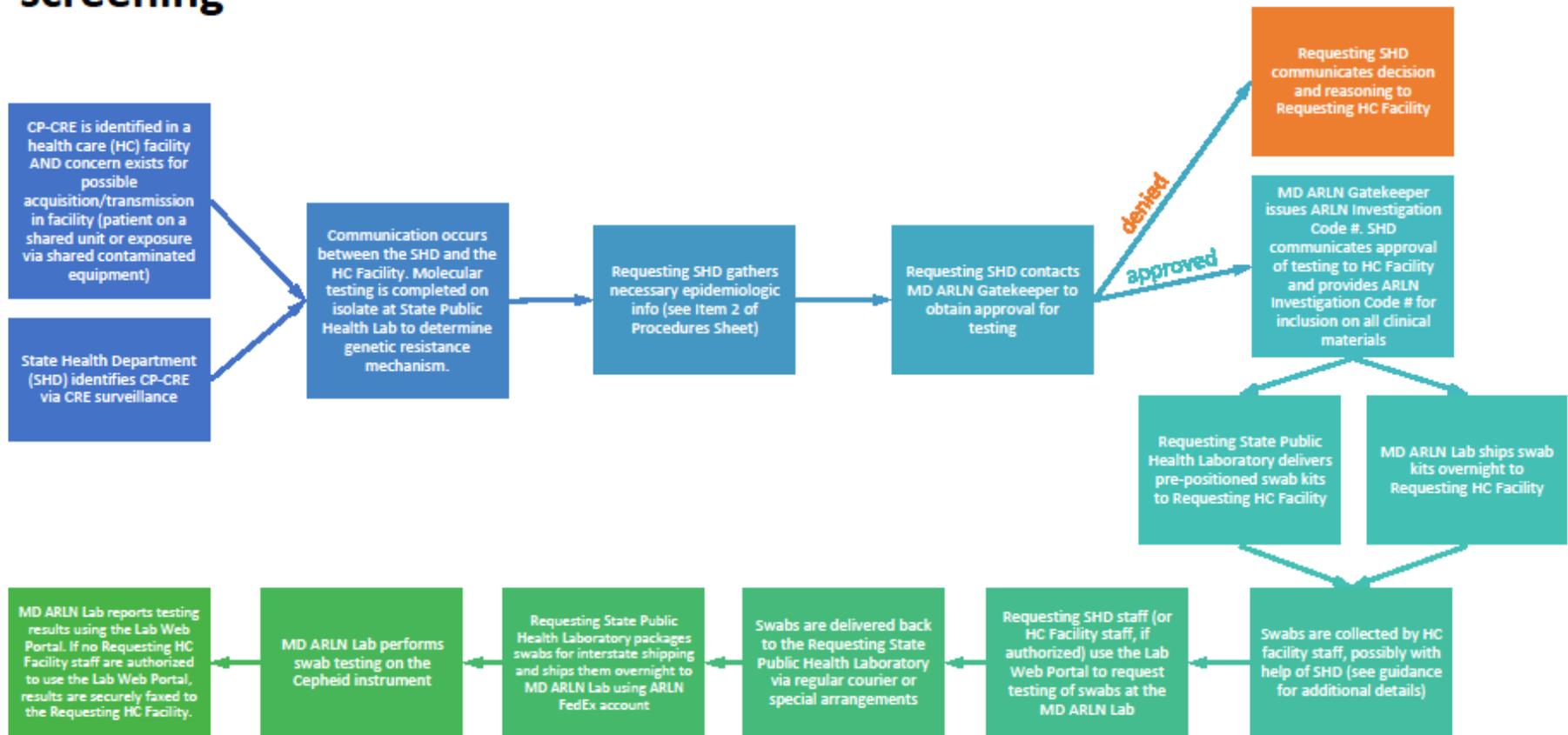


Maryland Department of Health Laboratories Administration
INSTRUCTIONS FOR SPECIMEN SUBMISSION FOR CRE COLONIZATION TESTING

1. **REQUEST AND APPROVAL FOR TESTING:** Contact your State or District of Columbia Health Department epidemiologists if you are considering CRE colonization screening in support of an investigation into possible antimicrobial resistance transmissions at a health care facility after the detection of epidemiologically important CRE isolate at that location.
- Below are the contact information for HAI/Epidemiologists from each jurisdiction and the flowchart of process for requesting MD ARLN Laboratory assistance with CP-CRE colonization screening.** Also see **Appendix 1** for detailed protocol for approval.

State Health Department	HAI Point of Contact	Secondary Contact
Maryland (REGIONAL)	Lucy Wilson, MD, ScM Phone # 410-767-6710 Email: lucy.wilson@maryland.gov	Richard Brooks, MD Phone # 410-767-7395 Email: Richard.brooks@maryland.gov
Delaware	Judy Walrath, PhD Phone # 302-744-4877 Email: judy.walrath@state.de.us	
District of Columbia (D.C.)	Emily Blake, MPH Phone # 202-727-3919 Email: doh.hai@dc.gov	Jacqueline Reuben Email: doh.hai@dc.gov
North Carolina	Tammra Morrison, RN Phone # 919-715-1642 Email: tammra.morrison@dhhs.nc.gov	
Pennsylvania	Cara Bicking Kinsey Phone # 717-547-3480 Email: cbickingki@pa.gov	Lisa Dettinger Email: ldettinger@pa.gov
South Carolina	Nijika Shrivastwa, PhD, MHSA, MPH Phone # 803-898-0575 Email: shrivan@dhec.sc.gov	
Virginia	Sarah Lineberger, MPH Phone # 804-864-8135 Email: sarah.lineberger@vdh.virginia.gov	Seth Levine, MPH Phone # 804-864-8116 Email: seth.levine@vdh.virginia.gov
West Virginia	Stacy Leadman Phone # 304-558-5358 stacy.r.leadman@wv.gov	Alex Daniels Phone # 304-356-4023 Email: Alex.r.daniels@wv.gov

Flowchart for requesting CP-CRE colonization screening



Note: Specimens can only be submitted to the ARLN Regional Laboratory for colonization testing if the jurisdiction’s health department and the Regional Laboratory approve the testing request. An approved investigation code will be assigned and provided for each CRE colonization testing event. This investigation code will be used to uniquely identify the outbreak and initiate the testing process.

2. **OBTAINING SPECIMEN COLLECTION KITS:** Once testing has been approved, the stool swab collection kits with instructions can be obtained from your jurisdiction’s (state or DC) public health laboratory or the ARLN Regional Laboratory.

Find below the names and contacts of public health labs:

State Health Department	Laboratory Point of Contact	Secondary Contact(s)
Maryland (REGIONAL)	MD ARLN team mdphl.arln@maryland.gov	Niketa Jani Niketa.Jani@Maryland.gov Jonathan Johnston Jonathan.Johnston@Maryland.gov
Delaware	Debra Rutledge Debra.Rutledge@state.de.us	Gregory Hovan Gregory.Hovan@state.de.us
District of Columbia (D.C.)	Horng-Yuan Kan Horng.kan@dc.gov	Anthony Tran Anthony.tran@dc.gov
North Carolina	Shermalyn Greene Shermalyn.Greene@dhhs.nc.gov	
Pennsylvania	Ram Nambiar anambiar@pa.gov	Lisa Dettinger ldettinger@pa.gov
South Carolina	Sandra Bandstra BANDSTSJ@dhec.sc.gov	
Virginia	Latoya Griffin-Thomas Latoya.Griffin-Thomas@dgs.virginia.gov	
West Virginia	Christi Clark Christi.D.Clark@wv.gov	

The public health lab will provide you with the required number of specimen collection kits via local couriers, the local/state health department or by FedEx shipment. Your jurisdiction’s public health laboratory may be able to provide the kits sooner by using existing local courier services in your area. Alternatively contact the ARLN regional laboratory at mdphl.arln@maryland.gov as mentioned in the table above. The ARLN regional lab will make arrangements for the collection kits to be delivered to your facility by FedEx.

3. **FILL OUT TEST REQUEST FORM** (Please follow this Provisional procedure until the ETOR/LWP (Electronic Test Order and Result/Lab Web Portal) implementation): Go to <https://health.maryland.gov/laboratories/Pages/home.aspx> and select tab ARLN Webpage and click on the CRE colonization screening requisition link which will bring up our fillable test request form. Fill out the Approved Investigation Code, your Public Health HAI Coordinator and Lab contact information as well as the Specimen Collection Site information. Make the necessary number of copies, one for each of patients that will be screened. Fill in the patient demographic information. See an example case with illustrated directions on (page # 7) for completing CRE colonization screening requisition. A blank copy of CRE colonization screening requisition form is also available on page # 8. Until the ETOR/LWP (cloud based portal) is established, this form must be completed when submitting pre-approved specimens for CRE colonization to the Maryland ARLN Laboratory. Specimens submitted without this form or without prior approval from the HAI coordinator will NOT be accepted for testing. At least two patient identifiers are required on the test request form as well as on the specimen tube.

TEST ORDERING VIA ON ETOR/LWP (Electronic Test Order and Result/Lab Web Portal): Access to the portal will be available upon submission of Network access request form (NARF) forms to APHL. Please contact ARLN laboratory for further information. Alternatively, your state HAI coordinator can order the test via the portal. Order the CRE colonization screening requisition on the Electronic Test Order and Result (ETOR)/Lab Web Portal (LWP). (Please refer to **Appendix 2** for the detailed step by step instructions for ordering the test on the portal.) Briefly follow the steps as mentioned here: (1) Login using your user name and password on the portal at website: <https://aims.labwebportal.com/md/#/login> (2) Click on Test Order tab on the top left of the Home page (3) On the CRE Colonization Screening Requisition, fill in the Approved Investigation Code, your Public Health Department details, Health Care Facility details and patient demographics, date of collection, specimen type and other required (marked with a red asterisk *) as well as optional details if available. (3) Click on Submit. (4) Several fields will be auto-saved and can be recovered when filing out test order form for other patient contacts from the outbreak.

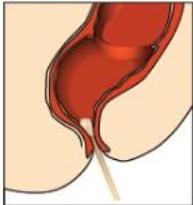
SPECIMEN COLLECTION: Specimens should be collected using the Cepheid dual-swab collection devices provided by your public health laboratory or the ARLN regional laboratory. Follow the specimen collection guideline illustration attached in the

specimen collection kit (see below).

State of Maryland
Department of Health
Laboratories Administration
Maryland Regional ARLN Laboratory

Rectal Swab Collection Instructions for CRE colonization screening

- 1 

Use Cepheid Collection Device #900-0370 to collect rectal swab specimen.
- 2 

Carefully insert both swab tips approximately 1 cm beyond the anal sphincter and rotate gently.
- 3 

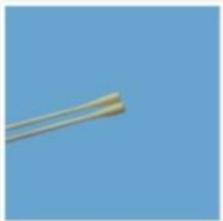
Place the swabs back into the original tube and seal it with a piece of Parafilm.
- 4 

Swabs in transport tube can be stored at 15-28°C for up to 5 days. Label the specimen tube with Patient name, date of birth and date of collection.
- 5 

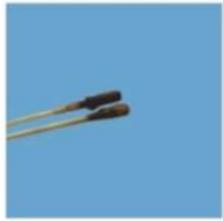
Place one transport tube into biohazard bag containing absorbent paper. Make sure the bag is fully sealed.
- 6 

Place the completed test request form into the outer pocket of the bag containing the corresponding specimen.

Examples of Acceptable swabs for CRE colonization testing



Unacceptable-Too much specimen



Collect the specimens (2 swabs/tube/patient) from each patient and suspected close contact. Appropriately label the tube with 2 patient identifiers and seal the specimen and un-zip the biohazard specimen transport bag. Place each specimen tube in the provided sealable bag to prevent cross contamination if the specimen would leak in transit. At least two patient identifiers that match the patient identifiers on the test request form are required to be written on the specimen collection tube to assure proper identification. Include the completed form with the specimen.

4. **PACKAGING AND SHIPPING:**

PACKAGING: Rectal swab collection kits are classified as Category B Biological Substances in accordance with Department of Transportation (DoT) Hazardous Materials Regulations (49 CFR Part 171-180). Guidance for packaging samples in accordance with Category B Biological substance requirements can be found in the CDC/NIH Publication Biosafety in Microbiological and BioMedical Laboratories, 5th edition. Additional information about the DoT Hazardous Materials Transport Regulations can be found at <https://www.transportation.gov/pipelines-hazmat>. Please ensure that employees tasked with packaging and/or shipping swabs are properly trained. Please refer to the attached detailed packaging and shipping guidance as well (See **Appendix 3**).

SHIPPING: Access to a CDC ARLN FedEx account with instructions for use of the account will be provided by your public health partners or the ARLN regional laboratory. Refer to how TO USE ARLN FEDEX ACCOUNT guidance (See **Appendix 4**)

Appropriately packaged specimens can be directly shipped at room temperature (15-28 °C) using the ARLN FEDEX account at the following address:

Maryland Department of Health Laboratories Administration
Attn: ARLN Regional Lab
1770 Ashland Ave.
Baltimore, Maryland 21205

Please notify the ARLN lab when the specimens have been shipped and provide the FedEx tracking number.

5. **RECEIVING RESULTS:** The MD ARLN laboratory will report the testing results back to the submitting healthcare facility, state public health laboratory and coordinating state epidemiologist via secure communications. Please provide a secure fax number where the results need to be sent. Upon the implementation of ETOR/LWP, the reports will be available to the submitting laboratory directly on the portal. For further questions on testing and reports, please contact the MD ARLN Laboratory at mdphl.arln@maryland.gov.

STATE LAB
Use Only

Maryland Department of Health - Laboratories Administration
1770 Ashland Avenue - Baltimore, MD 21205
(443) 681-3800 <http://health.maryland.gov/laboratories>
Robert A. Myers, Ph.D., Director



CRE Colonization Screening Requisition

CRE colonization screening testing by the ARLN Regional Laboratory requires approval by the requesting state's healthcare-associated infection (HAI) coordinator or lead epidemiologist

Approved Investigation Code: MD 2016-0001

Public Health HAI Contact

Public Health Department: Maryland Lab 1
Name: Andrew John
Phone: 111-111-1110 Email: andrew.john@gmail.com
State Investigation ID (eg. Outbreak code): 100
Contacts Screening Initiated by: Patient with Confirmed CRE on shared ward/unit

Public Health Lab Contact (Submitter)

Name: Joe Shmo
Phone: 111-111-1111 Email: joe.shmo@mdlabor.com
Lab Address: 123 Maryland Road
Lab State: MD Lab Zipcode: 12345

Sample Collection Site (Institution with Outbreak)

Facility Name: TEST FACILITY 1
Facility Address: 100 E. TEST FACILITY ROAD
Facility State: MD Facility Zipcode: 12346
Facility Point-of-Contact: JANE AUSTEN
Phone: 123-123-1234 Email: JANE.AUSTEN@MAIL.COM
Test Request Authorization by (Full Name, Credentials): TRAB D, MD

Clinical Lab ID (eg. CLIA Number): _____ Facility Type: Long Term Acute Care
Secure Fax: 123-123-1245

Patient Demographics

Patient Last Name: JOHN Patient First Name: DOE
Patient DOB: 01/01/2001 Patient ID: X00001

Facility Specimen ID: TESTFAC 1
State PHL Specimen ID: MDA 100
Collection Date: 12/01/2016 Specimen Type: Rectal Swab

Comments:

Must complete the submitter information including the State HAI contact, State PHL and Sample Collection Facility (These 3 contacts are where reports will be sent)

Include the name of Test request Authorization by (practitioner requesting the test). Select the credentials of the health care practitioner.

Complete the patient demographic information (at least 2 patient identifiers are required)

Enter any comments here

Enter the Approved Investigation Code obtained from the State HAI Coordinator

Facility type must be selected from pull down menu

At least 2 patient identifiers must match on the specimen container and the requisition. Without the patient identifiers on the tube, the specimen will be rejected.

Specimen type must be selected from pull down menu

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Robert A. Myers, Ph.D., Director



CRE Colonization Screening Requisition

CRE colonization screening testing by the ARLN Regional Laboratory requires approval by the requesting state's healthcare-associated infection (HAI) coordinator or lead epidemiologist

Approved Investigation Code: _____

Public Health HAI Contact

Public Health Department: _____
Name: _____
Phone: _____ Email: _____
State Investigation ID (eg. Outbreak code): _____
Contacts Screening Initiated by: _____

Public Health Lab Contact (Submitter)

Name: _____
Phone: _____ Email: _____
Lab Address: _____
Lab State: _____ Lab Zipcode: _____

Sample Collection Site (Institution with Outbreak)

Facility Name: _____
Facility Address: _____
Facility State: _____ Facility Zipcode: _____
Facility Point-of-Contact: _____
Phone: _____ Email: _____
Test Request Authorization by (Full Name, Credentials): _____
Clinical Lab ID (eg. CLIA Number): _____ Facility Type: Select one
Secure Fax: _____

Patient Demographics

Patient Last Name: _____ Patient First Name: _____
Patient DOB: _____ Patient ID: _____
Facility Specimen ID: _____
State PHL Specimen ID: _____
Collection Date: _____ Specimen Type: Select One
Comments: _____